208.2 - Electrical Properties of Dielectrics

SRM 624 is a lead-silica glass block that is intended to validate test methods and for calibrating equipment used to determine the dc volume resistivity of glass per ASTM C 657.

SRM 774 is a lead-silica glass block that is intended to validate methods used to determine the low-frequency dielectric constant and ac loss characteristics of insulating materials per ASTM D 150. Certified values of dielectric constant and dissipation factor are specified at frequencies between 0.06 to 10 kHz.

SRM 2870 is a cross-linked polystyrene puck that is intended to validate techniques used to measure the high-frequency relative permittivity and loss tangent of insulating materials. Certified values for relative permittivity and loss tangent are specified at 10 GHz, including supplemental data between 1 and 25 GHz.

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit of Issue	Geometry and Unit Size	Parameter(s)
624	Lead-Silica Glass for dc Volume Resistivity	200 g	Block 5 cm square 2.5 cm thick	DC Volume Resistivity
774	Lead-Silica Glass for Dielectric Constant and ac Loss Characteristics	block	Block	Dielectric
2870	Relative Permittivity and Loss Tangent 1422 Cross-Linked Polystyrene	circular-cylindrical puck	Circular-Cylindrical Puck 60 mm diameter 10 mm thick	Relative Permittivity Loss Tangent

- Certified values are normal font
- Reference values are italicized
- Values in parentheses are for information only